

Memorandum

Subject: **ACTION**: FY 2003 Participation in the High Occupancy Vehicle (HOV) Systems Pooled Fund Study

Date: **December 12, 2002**

From: Jeffrey F. Paniati /s/ *Jeffrey F. Paniati*
Acting Associate Administrator for Operations
Acting Director, ITS Joint Program Office

In Reply
Refer To: HOTM-1

Dennis C. Judycki /s/ *Michael Trentacoste for*
Associate Administrator for Research, Development, and Technology (HRT-01)

To: Division Administrators

On behalf of the current members of the High Occupancy Vehicle (HOV) Systems Pooled Fund Study (PFS), the Federal Highway Administration (FHWA) is soliciting the participation of your State in fiscal year (FY) 2003. If your State is already a member of the HOV Systems PFS (see list of members in Attachment 1), we would like to express our appreciation for your past support, assistance with obtaining their continued participation in FY2003, and with obligating the funds that are committed. Current members should discuss their continued participation and appropriate level of support with their technical representative to the HOV Systems PFS.

If your State is not yet a member, please take this opportunity to discuss with them the benefits of participating in the HOV Systems PFS partnership with the State Research Director, State Traffic Engineer, Planning Director, and/or HOV leaders in your State. Also, please consider discussing the opportunity to join and benefits of participating in this PFS with other agencies and interests in your State that are responsible for the HOV systems in your State. Such agencies may include cities, counties, regional transportation or transit authorities, toll, turnpike, or port authorities. Any public agency is eligible to join and is invited to participate, by submitting a commitment form to initiate the process to join the HOV Systems PFS (Attachment 2).

The goal of the HOV Systems PFS is to assemble regional, State, and local agencies, service providers, and FHWA to: (1) identify issues that are common among agencies; (2) suggest projects and initiatives; (3) select and initiate projects intended to address identified issues; (4) identify recommendations and potential solutions, and (5) disseminate results. The HOV Systems PFS is intended to serve as a forum for the participants to identify and address the key issues and challenges that are common among public agencies.

The HOV PFS members will be meeting on December 12 to select the projects that will be initiated in 2003 based on the funds that are currently available. Eight project proposals have been developed and identified by the members as priorities to consider further for selection at this meeting. A brief description of these proposed projects and the products that would be developed are also included in Attachment 1. These projects include:

- HOV Data Collection and Management
- HOV Performance Monitoring, Evaluation, and Reporting
- HOV Enforcement Best Practices
- HOV Facility Inventory and Clearinghouse
- HOV Marketing Manual Update
- HOV Facility Hours of Operation and Eligibility Requirements
- HOV Safety Considerations and Best Practices
- HOV Demand Estimation Procedures and Software Update

Agencies interested in joining the HOV Systems PFS should complete the enclosed commitment form by February 28, 2003 (Attachment 2). The early submission of this form by this date is encouraged to enable immediate participation in the process to implement the projects that are selected at the December meeting and initiate in the process to identify and select any new projects that may also be able to be initiated based on additional funding that new members commit to HOV Systems PFS for 2003. However, agencies can join at any time during the year. Agencies are approved to use 100 percent SP&R funds to participate in the HOV Systems PFS.

New agencies that join the HOV Systems PFS also have the option of having their staff participate on the teams that review and provide direction to the products that are being developed by current projects. These projects provide an excellent career development and training opportunity for public agency staff to gain exposure to and learn about innovative strategies, techniques, and approaches on how to address the key issues and challenges that public agencies are facing.

Information on the HOV Systems PFS is available on the web at <http://hovpfs.ops.fhwa.dot.gov/>. For additional information on joining the TMC PFS, contact Jon Obenberger at (202) 366-2221, jon.obenberger@fhwa.dot.gov; or Felipe Luyanda-Andino at (202) 493-3368, Felipe.Luyanda-Andino@fhwa.dot.gov.

Attachment

cc:

AASHTO Research Advisory Committee Members
 Directors of Field Services
 Resource Center Managers

High Occupancy Vehicle (HOV) Systems Pooled Fund Study: FY 03 Overview

Purpose and Goal of HOV Systems Pooled Fund Study (PFS):

The HOV Systems PFS is intended to provide a forum for the participants to identify and address the key issues and challenges that are common among public agencies that are responsible for and manage these facilities. The HOV Pooled Fund Study will focus on the critical program, policy, technical, and other issues that arise throughout the life cycle of an HOV facility. The goal of the HOV Pooled-Fund Study (HOV PFS) is to assemble regional, state, and local agencies, and the Federal Highway Administration (FHWA) to:

1. Identify issues that are common among agencies;
2. Suggest projects and initiatives;
3. Select and initiate projects intended to address identified issues;
4. Disseminate results; and
5. Assist in solution deployment.

Membership:

Membership in the HOV Systems PFS consists of seven agencies including FHWA. Agencies may join at anytime during the year by committing funds at a level deemed appropriate by the members. The study has been approved for 100 percent SP&R funding. Any non-commercial agency or organization that is responsible for the management and operation of any portion of the surface transportation system is welcome to join the study. Such agencies and organizations may include cities, counties, transit agencies, toll authorities, turnpike authorities, port authorities, and corridor coalitions. Current members are the FHWA and the following agencies:

Member	Technical Contact
California Department of Transportation	Antonette Clark
Federal Highway Administration	Jon Obenberger Felipe Luyanda-Andino
New Jersey Department of Transportation	Laine Rankin
New York Department of Transportation	Wayne Ugolik
Tennessee Department of Transportation	Donald Dahlinger
Virginia Department of Transportation	Katherine Graham
Washington Department of Transportation	Toby Rickman

Process to Identify, Prioritize, and Select Projects:

The members meet annually to review progress on current projects, and to identify and select new projects. Projects are selected based on needs that are identified through an iterative process that involves the HOV Systems PFS member input, state-of-practice reviews, and issues identified by professional organizations. Based on the prioritized list of needs, project proposals are developed for further consideration and reviewed by

members in advance of the annual meeting. At the annual meeting these project proposals are reviewed, revised, prioritized, and selected through an iterative process. Consensus building techniques are used to ensure that the needs identified by all members are accommodated to the extent possible.

The projects that are selected and advanced are based on priority ranking established by the members and resources that are available to the study for that year. Project groups that consist of representatives from the member agencies guide the development of the scope of the project, provide technical assistance, and direction after the annual meeting. This involvement includes any further revision of the project scope, clarification of project objectives, development of the statement of work, contractor selection, technical review and direction throughout project development and execution.

The new number of projects that will be selected in 2003 will be based on the funds that are available to the HOV PFS. As part of its contribution to this study, FHWA will provide the necessary staff and resources to manage, provide technical expertise, and administratively support for the HOV Pooled Fund Study. As a result, all of the funds that members contribute will go directly toward the projects that are selected. Contract solicitations will be issued through normal FHWA procurement procedures to perform the work that may be necessary based on the projects that are selected.

Current Projects:

The HOV PFS members will be meeting on December 12 to select the initial list of projects that will be initiated in 2003 based on the funds that are currently available. Eight project proposals have been developed and identified by the members as priorities to consider further for selection at this meeting. The following is a brief description of these proposed projects and the products that would be developed:

HOV Data Collection and Management:

The objective of this project data collection and management is to develop a technical reference that provides guidance and best practices on HOV. On a national level, results of this research would help set performance standards for automated data collection and warehousing technologies. Major products of this project would include developing a technical report of functional requirements, prototypical data management plan and best practices for data collection, distribution and warehousing, developing prototype database templates and spreadsheets for use during the collection, refinement or tabulation of common types of HOV performance monitoring data, and developing a web-based inventory of HOV operational data.

HOV Performance Monitoring, Evaluation, and Reporting:

The approach for this project is two phased. The first phase would focus on improving the NCHRP HOV Systems Manual performance evaluation guidelines (Chapter 13) by examining current practice and offering specific guidance for developing and managing performance monitoring programs for small and large systems, for reporting results to different audiences, and to offer guidance in monitoring consistency, reporting and

dissemination of information. The second phase would focus on working with locations currently performing HOV monitoring to standardize key parameters so that they can be compared within and between other areas to validate HOV system performance. The second phase would also establish a framework for disseminating results from various regional performance monitoring studies using the PFS website as a performance monitoring data “clearinghouse”. Phase I products would include: an updated technical reference to the HOV Systems Manual; guidelines for performance monitoring methods for reporting and comparison to other projects; and short-term and long-term policy recommendations for HOV facilities as a guide to future decisions on the planning, design and operations of future HOV facilities.

HOV Enforcement Best Practices:

The effort for this project would be two-fold. The first phase would be to survey current practice and report back on issues faced, strategies used, and innovative tools employed to reduce the need for enforcement presence. The second phase effort would examine new technology and institutional hurdles in adopting and applying new technology to automate enforcement activities. The products of this effort would be separate technical reports. The first phase would document survey results and compile best practices from this effort, along with augmenting guidance for HOV and enforcement training purposes. This second phase would be documented in a guide that provides steps to apply new enforcement strategies that rely on automation technology.

HOV Facility Inventory and Clearinghouse:

The purpose of this project is to help promote the exchange of factual knowledge among experienced HOV practitioners, while providing an outlet for anybody to access this information. This database management activity will build on current efforts through identified project contacts to develop communication structures and protocols to encourage even greater levels of participation and dissemination for the most commonly collected HOV data, while also serving as a point of information exchange among practitioners. The products of this project include: updated inventory of planned and existing projects plus new database entries where performance data is available; protocols and outreach to practitioners for use in updating the inventory; listserv bulletin boards for information distribution and outreach; and brochures and presentations that highlight value, benefits, trends and challenges agencies face with HOV lanes for senior management and elected officials.

HOV Marketing Manual Update:

The approach suggested for performing this project is outreach to locales where HOV lanes are in operation, to locations where public surveying of attitudes has been conducted recently, and where operation policies have been changed or reassessed. The proposed activities include: conduct targeted market research with operators and local agencies; undertake or review the role marketing played in case studies where operation policies were changed; and develop marketing tools and methods to promote improved

public understanding and acceptance of existing and future HOV facilities. The products of this project would be stand-alone materials and supplemental information to an updated marketing manual, fact sheets of selected topics to be developed on key issues, and Q&A's for different stakeholders that would include but not limited to media, general public, fire and emergency medical, enforcement, elected officials/senior managers.

HOV Facility Hours of Operation and Eligibility Requirements:

The focus of this project will be to assess the impacts of changing vehicle-occupancy requirements on HOV facilities. This study will include an analysis of changes in carpool and bus use, impacts on general-purpose lane traffic, potential role of pricing to support metering some demand back into the lane, enforcement issues, and other factors. The research will also develop techniques for better estimating changes in HOV demand when increasing vehicle-occupancy requirements from 2+ to 3+ and considering pricing during this transition. The main products of the project include synthesis of experience and best practices and technical report(s) addressing operation periods, eligibility and related operation policies affecting access and lane performance.

HOV Safety Considerations and Best Practices:

While a significant number of HOV lanes are in operation, very little quantitative information or guidance exists to help the designer or operator implement the best possible facility treatment and operation policy to a specific setting. This project would provide a decision-making process and framework to assess safety related issues for current and future HOV operations and designs. The products of this project include: applications-based tools and guidance to help practitioners analyze different designs and operating conditions, based on input from practitioners; a guidance document that addresses accident reporting and training of incident response personnel responsible for accident record keeping; and a comprehensive technical report that will provide guidance on assessing safety related issues for HOV operations and designs.

HOV Demand Estimation Procedures and Software Update:

The FHWA has sponsored efforts in the past to develop relatively easy-to-use "sketch planning" techniques for estimating HOV demand. One method, developed by Charles River Associates Incorporated (CRA), and documented in the report "Predicting Travel Volumes for HOV Priority Techniques: User's Guide", April 1982, proved to be an effective model, but is 20 years old and in need of updating. A second FHWA sponsored method, "QuickHOV", was developed in 1996 by Dowling Associates. The focus of this project would be to review these two previously developed sketch planning HOV demand estimation procedures, assess their "pros and cons", and determine how best to revise and update them. The review would include assessing algorithms used in each model, and comparing them to the state-of-the-practice. The product of this project would be an updated version or replacement tool to CRA and/or QuickHOV developed in electronic spreadsheet format for easy use and application. In addition to basic HOV demand estimates, other features of the model to make it more versatile and useful for the practitioner will be identified through the development process.

Governance and Charter:

A charter, ratified by the members, governs the following aspects of the HOV Pooled Fund Study: membership; project selection; project management, coordination, and solicitation; policies and procedures; fiscal management; and overall HOV Pooled Fund Study management. Because the charter may require updates as new issues are identified, a provision for amendment of the charter by the members is provided. The complete HOV Pooled Fund Study charter is available at <http://hovpfs.ops.fhwa.dot.gov/>.

FHWA contacts:

For additional information on the HOV Pooled Fund Study contact Jon Obenberger at (202) 366-2221, jon.obenberger@fhwa.dot.gov, or Felipe Luyanda-Andino at (202) 493-3368, felipe.luyanda-andino@fhwa.dot.gov. Information on the HOV Pooled Fund Study is also available on the web at <http://hovpfs.ops.fhwa.dot.gov>. To request documents or material that are not available on the HOV Systems PFS website, contact Ming-Shiun Li at (612) 373-6335, ming_shiun_li@urscorp.com.

HOV SYSTEMS POOLED FUND STUDY: FUNDING COMMITMENT FORM

STATE/ORGANIZATION: _____ Date: _____

STUDY TITLE: "High Occupancy Vehicle (HOV) Systems Pooled Fund Study (PFS)"

STUDY NUMBER: TPF-5(029)

Submitting this form indicates that your agency intends to participate and transfer the funds noted in the commitment column below to the HOV Systems PFS. Agencies, as stated in the FY2003 participation memo from Jeffrey Paniati and Dennis Judycki, are approved to use 100 percent SP&R funds to participate in the HOV Systems PFS. Subsequent to making the funding commitment, agencies should transfer and/or obligate their funds for 2003. Please indicate if your agency will immediately transfer the funds committed for 2003 or at a future date. Also indicate if your agency plans to use funds other than SP&R and the method that will be used to transfer these funds.

_____ YES _____ NO

PROPOSED LEVEL OF FUNDING SUPPORT: \$ _____

<u>FY Year</u>	<u>Commitment</u>	<u>Comment</u>
2003	\$ _____	_____
2004	\$ _____	_____
2005	\$ _____	_____
2006	\$ _____	_____

If Federal-aid funds will be electronically transferred, the Federal-aid Project Authorization and Project Agreement Form must be submitted to the FHWA Division Office in your state. These funds need to be entered in the FHWA Fiscal Management Information System (FMIS) as TPF5029 to obligate and make these funds available to the HOV Systems PFS. Note that the three letters are a part of the formal project number assigned to the HOV Systems PFS that must be entered into FMIS.

Agencies may use non-Federal-aid or other sources of funds to participate in the HOV Systems PFS. The transfer of these funds must be in the form of a check made payable to the Federal Highway Administration and submitted directly to the FHWA Lockbox. The address of the lockbox is: FHWA, P.O. Box 100147, Atlanta, Georgia 30384-0147. The HOV Systems PFS and project number TPF5029 must be included on both the submittal letter and check to ensure that the funds are properly credited to the HOV Systems PFS.

Notes: _____

TO JOIN: Please return this completed form to Jon Obenberger by February 28, 2003 at Jon.Obenberger@fhwa.dot.gov or faxed to (202) 366-8712.

STATE/ORGANIZATION CONTACTS:

Technical Contact: _____
Title: _____
Address: _____

Phone: _____
Fax: _____
e-mail: _____

Funding Contact: _____
Title: _____
Address: _____

Phone: _____
Fax: _____
e-mail: _____